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ABSTRACT

Directed primarily at the University of Mid-America (UMA) as a specific program to be evaluated, this report sets forth criteria that can also be applied to other nontraditional educational programs and other programs in general. In a section on terminology, definitions are offered for criteria, standards, indicators, measures, success, and open learning systems or nontraditional study programs. A short history of the State University of Nebraska (SUN) and UMA is given, and the idea of open learning is discussed. UMA goals and characteristics are identified, along with criteria for determining success, the issue of access, relevance to needs and expectations, quality of program offerings, learner outcomes, cost effectiveness, institutional impact, consequences, and generation of knowledge. The paper represents only a first step in a process of conceptualizing the bases upon which policy might be established concerning provision of postsecondary education opportunities and benefits to adults. Implications for a UMA external evaluation are discussed. A 50-item bibliography is included. (LBH)

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CRITERIA FOR EVALUATING THE SUCCESS OF THE UNIVERSITY OF MID-AMERICA

Working Paper No. 9

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HE 010 410

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August, 1975

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CRITERIA FOR EVALUATING THE SUCCESS OF THE UNIVERSITY OF MID-AMERICA*

Dennis D. Gooler
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It is reasonable and important at any time to inquire into the worth or value of social or educational programs, particularly those programs which expend public monies. These inquiries become increasingly important as the economic philosophy of a society moves from an add-on (create more) philosophy to a redistribution of finite resources (make do with what we have) philosophy. There are limited resources available at any point in time to accomplish the myriad of programs or services that are desirable to at least some segment of society. If a new or different program is desired, support for that program must be obtained at the expense or exclusion of some other program or programs. The relative worth of the intentions or goals of any proposed program must thus be carefully examined before decisions are made to support the program. So too must the success of a selected program in meeting its goals be carefully evaluated to justify further support or improvement of that program.

There are numerous difficulties associated with both determining the worth of intentions, and the success with which those intentions are realized. One of the primary difficulties is that not everyone holds the same view of what is of worth, or, indeed, of what constitutes success. Further, there is often disagreement as to what should even be considered in seeking to determine success in an educational program.

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*Revision of a paper originally presented at the Second National Conference on Open Learning and Nontraditional Study. Washington, D.C., June 1975.

Innovations are amenable to considerable evaluation. New programs are called upon to justify their intentions and their success to an extent far greater than existing programs or institutions. It is interesting to speculate as to what would happen if the measures of success demanded of new programs were also demanded of existing programs. The burden of proof lies heavily on new programs. As new programs, open learning or nontraditional study programs are subject to questions of value and success, both posed by multiple publics. Each of these publics has a different idea about worth and success.

The specific motivation for development of this paper is found in one of the conditions set forth by the National Institute of Education (NIE) in its grant to the University of Mid-America (UMA), a multi-state consortium established to develop and operate a regional postsecondary open learning program. NIE recognized the need for an external evaluation of UMA, and has in fact let a contract to TEAM Associates, Inc., to gather data necessary to design such an external evaluation. As part of preparing for the external evaluation, UMA was asked by NIE to prepare "specific goal-derived measures of success, which can be used in an external evaluation."

UMA conducts an extensive in-house effort to evaluate its processes and outcomes. An external evaluation of the project will provide external credibility, and may yield useful insights resulting from an outsider's view of what is going on in the organization.

While the individual or agency that conducts the external evaluation may have ideas about the criteria to be used in assessing UMA, it is important that UMA itself have a clear idea as to the basis on which the organization

ought to be judged. Measures of success, or criteria, may logically follow from an examination of the goals and mission of UMA, as well as from an understanding of the needs for postsecondary educational opportunity in this society. Because of the expansiveness of the UMA operation, there are a variety of perspectives from which the organization might be judged. It is the intent of this paper to highlight some of these many perspectives.

While the NIE proviso specifically stimulated work on this paper, other more general reasons motivate the ideas herein. First, it is important to see deliberations about criteria for success not solely as summative judgments of a program, but as an important aspect of clarifying intentions. To think about success early in program building, rather than as a post hoc exercise, sharpens the planning process (Moynihan, 1970; Grotelueschen and Gooler, 1972).

There is also a fundamental need to better understand educational change and innovation. The literature in these areas is extensive, yet relatively little has been done to systematically assess the outcomes and worth of educational innovations. Some have argued that the very way many innovations are planned and conducted precludes a capacity to address the really important questions about those innovations (Rivlin, 1971). While evaluation is generally advocated as a vehicle for understanding innovation and improving public policy, some have urged caution in the use of evaluation (Mushkin, 1973), largely because the process of evaluation is not well understood, and interpretations made from evaluation findings are often confused and confusing.

NIE is charged in part with promoting inquiries into innovation, and making the results of those inquiries available to interested people. An

external evaluation of UMA might focus either on UMA as a specific program or on UMA as an example of an innovation. In the first instance, judgments are made about the success of UMA as a program; in the second instance, attention is directed toward the potential generalizability of information about an innovation. Different success criteria might be employed depending on which perspective is adopted.

This paper is directed primarily at UMA as a specific program to be evaluated. The criteria set forth, however, appear to have some generalizability to other nontraditional educational programs, and, indeed, to other kinds of programs in general.

The paper begins with a discussion of terminology. The specific context of the UMA external evaluation is outlined in the next section. The third section of the paper outlines actual categories of criteria for determining the success of UMA or other nontraditional educational programs. The paper closes with some implications of these criteria for a UMA external evaluation.

Terminology

There are a number of terms to be used throughout this paper which require definition. Criteria, as used in this paper, refers to the dimensions according to which an educational program might be examined. The Random House dictionary defines a criterion as "an established rule or principle for testing anything."

There are many dimensions according to which any product or program might be tested or examined. For example, a book might be examined for: the quality of its printing; the longevity of its binding; the accuracy of its content; its ability to motivate, interest, or excite; its use rate

in a local library. Each of these dimensions represents a focus for judging that book--each is thus a criterion for assessment.

Criteria may be distinguished from standards, indicators, and measures. Standards are benchmarks of acceptability or excellence. They define how much and/or what kind of something is adequate. Standards reflect values, as do statements of goals (Stake, 1970). For purposes of judgment, specific standards must be developed for each criterion, to provide guidance in interpreting indicator data. Thus, in the previous example, a standard for acceptable use rate might be established as three (3) different people checking out the book during a one-month period. Standards may be empirically derived, may be established by authority, or may be obtained as a function of comparing one program to another. Different people may hold different standards relative to any given criterion.

Indicators are what is accepted as evidence of the actual status of a program or product with respect to a given criterion. Thus, an indicator of use rate of a library book is the number of check-outs of the book. The study of educational indicators has been on the increase lately, as a subset of the broader concern with the development of social indicators (See for example Sheldon and Moore (1968); Ferriss (1969); Wilcox, Brooks, Beal, and Klonglon (1972)).

Measures are defined here as the means or instruments for obtaining indicators data. A library card in a book would be one example of a measure for obtaining use indicator data.

The process of determining the success of a program, then, consists of deciding which criteria to use, gathering evidence through some measures on the status of the program on those criteria, and comparing status to

standard. Such a process is far from simple, due in part to the difficulty of clearly defining criteria, standards or indicators.

Success is defined as "the favorable or prosperous termination of attempts or endeavors." To succeed, according to the Random House dictionary, is "to accomplish what is attempted or intended; to happen or terminate according to desire; have the desired result." Success thus has to do with favorable judgments being rendered according to the process outlined above.

One of the most difficult aspects of determining success lies in the summary or aggregation of separate judgments. The definitions above give clues to this difficulty: it may be possible to accomplish what was attempted or intended, but not with a desired result. Unexpected or unintended outcomes may occur enroute to accomplishing intentions. On balance, such unintended outcomes, if they are negative, may outweigh the positive value of intended outcomes, the net result being a judgment of unsuccessful.

It is difficult to adequately define open learning systems or non-traditional study programs. Most often, these terms are used to describe programs which seek to offer educational services to new kinds of clientele, delivered in new or unusual ways, emphasizing flexibility through amelioration of normal time/space constraints, and possibly featuring different credentialling or crediting patterns. Such programs have taken many forms. Some of the better known examples include Empire State College, University Without Walls programs, the Open University of the United Kingdom, and the University of Mid-America.

UMA: Context for Evaluation

Regardless of whether one believes evaluation ought to focus on the extent to which program objectives are achieved, the congruency between

intended and actual processes or outcomes, or the collection of judgments about the worth of the program being evaluated, it is important to understand the context within which the program operates. This is particularly true in the case of open learning or nontraditional study programs, for the intents and procedures of such programs are often poorly understood by people. So too might the parameters of an external evaluation of these programs be unclear. Unlike more traditional institutions, masses of people have not participated in open learning programs; as a result, the conventional wisdom that accrues to people from participation in a program is thus not as great.

As a backdrop to considering the bases for an evaluation of UMA, then, some observations on the history and intentions of UMA are outlined below. [For a more detailed discussion of this history, see SUN, 1973; UMA, 1974.] This outline may be useful when considering potential criteria for assessing the success of UMA. A critical problem associated with evaluating an innovation is that the initial form of the innovation generally refuses to remain static. Goals change, personnel develop new perspectives with increased experience, and the needs and desires of the people to be served by the innovation change. Innovations are moving targets. This presents unique assessment problems, particularly if assessment is directed primarily at the attainment of goals; the goals often change.

A Short History of SUN and UMA

The State University of Nebraska (SUN) was formed in 1971, in response to a University of Nebraska study of the recommendations of the Carnegie Commission on Higher Education and Newman Task Force. During the first two years, this new project was supported by grants from the U. S. Office of Education, and particularly from the National Center for Educational

Technology. During this planning period, strategies for the design and delivery of mediated adult education were studied and experimental lesson modules were developed and tested. Three market and clientele surveys of the potential audience for open learning were commissioned. SUN subsequently received grants from the National Institute of Education to complete a series of specific work assignments directed toward completion of planning for a multiple-year regional open learning experiment.

During 1974, an economic model was developed to aid in assessing the economic implications of various operational procedures. This model, along with detailed five-year cash flow model developed by SUN, provided the initial fiscal information for the proposed plan of experimental operations. The two fiscal projections suggested that the UMA/SUN learning concept is fiscally sound: if the projections are realized, the program can achieve self-sufficiency at the end of the five-year developmental period; the potential social benefits of the system outweigh its social costs, and the system can operate at a cost level comparable with or lower than that of traditional postsecondary institutions and of other innovative programs such as the Open University of the United Kingdom.

In order to broaden its economic base of operations, increase its potential target audience, and assure that the open learning program reaches the widest possible learner market, SUN investigated formation of a regional consortium. The plan developed was thought to be both advantageous and feasible, and as a result the University of Mid-America was incorporated on a non-profit basis specifically for the regional production and dissemination of open learning systems in at least the states of Missouri, Iowa, Kansas, and Nebraska. Iowa State University, the University of Kansas,

Kansas State University, the University of Missouri, and the University of Nebraska were the initial participants in UMA. Bylaws were specifically written to encourage future additional participation or organizational changes as needed. UMA is thus proposed as the operational base from which a model regional open learning system can be developed and tested.

UMA is in fact neither a university in the usual sense (it has no faculty or campus) nor an external degree program (it offers no degrees or credits). It is a means of providing learners, through individual state delivery systems a rich variety of postsecondary learning opportunities which can be used to meet differing individual interests or the educational needs of specific groups of adult learners.

The Idea of Open Learning

The development of both SUN and UMA were predicated upon a concept broadly known as open learning. As suggested above, the term open learning has been and remains a somewhat ambiguous term. There is, however, a rationale for open learning that has been articulated by UMA which frames at least one meaning of open learning.

The Commission on Non-Traditional Study (1973) and the Newman Task Force Report (Newman et al, 1971) have called to the country's attention the need for open learning programs. In recent years, two facts have become abundantly clear: the American dream of equality has not extended to postsecondary education; and the orderly functioning of a truly open society demands that education reflect an openness in access, in content, and in structure. The value of education has always been assumed in America, but in previous generations education was completed early in life, as preparation for the pursuit of a vocation. In a rapidly changing technological

world, the old concept of an early period of education, followed perhaps by infrequent periods of "re-education" or "continuing education," is no longer sufficient; what is needed is a carefully planned system of recurrent life-long learning, in which education becomes a continuous and regular part of everyday life.

Moreover, the characteristics of this education must go beyond the mere offering of a traditional rigid curriculum. The learner's needs and interests--whether for skills, self-development, or general understanding--must be central, and the educational offerings must be both varied and flexible to provide this openness.

One primary aim of open learning is to improve access to education and thus educational benefits for all citizens, regardless of age or individual circumstances. Access to postsecondary education in this country has traditionally been limited mostly to the young, who are relatively free of social commitments that limit their mobility. Constraints of time and place imposed by institutions in the traditional system have all but closed off postsecondary education to those hampered by responsibilities of employment or family. Opening access to education means delivering education to the learner where he is, on his own terms, without requiring him to give up a job or other economic advantages in order to participate. Such equality of opportunity has long been an ideal at all levels of American education, but has seldom become a reality, particularly at the postsecondary level. Current advances in communications technology have presented the potential for delivering education without the usual institutional and time constraints, while keeping the learner central to the process. The careful use of technology should make it possible to increase the productivity of the

educational system, resulting in educational opportunities of comparable or better quality, available to a larger number of students at a lower per student cost.

This is a broad rationale, allowing a variety of kinds of manifestations to be legitimately called open learning programs. Rationales must eventually be transformed into actual programs or products, however. These programs will exhibit various characteristics. There is little agreement among educators as to the relevant or ideal characteristics of an open learning system (Wedemeyer, 1974; Medsker et al, 1975), although most agree that a capacity to extend access, and to recognize alternative learning styles, seems to be common across most conceptions of open learning.

UMA Goals and Characteristics

Within the framework of the national discussion of open learning, UMA sought to define its own mission as a regional postsecondary open learning model. The original purpose of the SUN program was to provide increased access to traditional postsecondary educational opportunities by making college courses available to people in their homes, using a variety of media but relying heavily on the sophisticated statewide Nebraska Educational Network as a major delivery mechanism. However, as SUN explored the issues involved in opening up learning, the staff arrived at its own much broader conception of what open learning would mean in UMA.

The mission of open learning, as seen by UMA, is broadly characterized as:

> Creating and implementing a variety of learning approaches to provide high quality, relevant college-level educational experiences primarily for people who heretofore have not had access to, or have not taken advantage of, college-level education.

while

> Carefully and systematically studying and documenting the effects and consequences of alternative ways of developing and providing these educational opportunities.

In UMA, then, open learning implies a commitment to increased accessibility to college-level education, and this accessibility means more than physical convenience--it means a readiness to meet students where they are educationally, as well as geographically, and to provide careful academic counseling and assessment to try to help them meet their educational objectives. The goals of any open learning program ought to be to make learning available to all who want it, regardless of where they live or what hours they work. In addition, open learning should reduce the constraints on how people can learn by utilizing new educational techniques and methodologies and should provide new opportunities for interdisciplinary study.

It was also possible to describe some characteristics of an open learning program that was consonant with this statement of mission. The 1974 UMA proposal to NIE described those characteristics as follows:

1. A policy of unrestricted admission, so that anyone who wishes to learn may do so, but with a primary target audience of adults who are interested in continuing their education, but who cannot or are reluctant to participate in campus-based programs;

2. An understanding of the needs and educational objectives of its learners, with a commitment to using that understanding in the planning of learning opportunities made available through the system;

3. The willingness and ability to try to meet the learner where he or she is educationally, by recognizing individual differences in entry levels, and by affording the learner advice and counsel as to how best to use resources available throughout the system to achieve personal or professional goals. This includes a willingness to help the learner overcome any initial reluctance to attempt postsecondary education. This might be accomplished by helping the learner design learning programs

which will maximize the possibility of success, while recognizing that not all potential learners will be able to achieve success in college-level work;

4. Provision of learning opportunities which enable the learner to learn at times and at places convenient to him, without prohibitive interference with job, family, or other obligations;

5. Reduction of constraints on <u>how</u> people can learn by utilizing a variety of educational media and materials, and personal contacts with faculty counselors, and other learners. Thus, persons can learn in ways which are most comfortable for them;

6. Provision of learning opportunities which allow the student flexibility in constructing his own learning sequence, so that UMA "courses" do not have single entry and exit points, nor single evaluation requirements, for all learners;

7. Provision of learning opportunities which are not dictated by the requirements of individual disciplines, but address themselves to subjects or problems that draw on whatever disciplinary expertise is appropriate;

8. The use of local and regional resources that already exist, in cooperation with present institutions, to expand the educational opportunities available to the learner in his own environment;

9. Reasonable costs, both to individuals and to society, so that the individual and societal benefits of learning become available to the target learners in this system at no economic penalty in comparison with the cost of attending traditional campuses;

10. An emphasis on learning rather than the meeting of arbitrary standards of time, courses, or curricular requirements and recognition of <u>achievement</u> of learning by students, however it occurs;

11. In courses bearing college credit, a level of academic quality (meaning the achievement expected of learners) no lower than that at a traditional university, so that work accomplished through the open learning system is fully accepted by other institutions;

12. More openness to self-examination, to research and evaluation than has heretofore been the case in postsecondary education; this openness includes a commitment to evaluation of learner achievement, to evaluation of effectiveness in meeting institutional and learner objectives, to incorporation of the results of these evaluations into policies and procedures, and to research that will contribute to generalizable knowledge about how the educational franchise can best be extended to all who wish it.

Given these characteristics, the UMA postsecondary open learning system was seen to differ from the traditional educational setting in a number of ways. First, its learners will be different, since UMA aims to reach target audiences among those who are not now reached by traditional institutions and since its learners are not restricted by admission requirements, or by rigidities of time and space requirements. Second, its offering of learning opportunities will be different, since its curriculum will not be structured solely around rigid blocks of content called "courses" but will be flexibly structured in units which can be put together by learners in a wide variety of ways to serve individual needs and interests. Third, UMA will use a variety of delivery approaches and personal contacts. Fourth, the curriculum will be nontraditional in that learning opportunities will be offered in both discipline-oriented and in problem- or topic-oriented areas. These learning opportunities will be sufficiently flexible and modularized that individual learning needs can be adequately met. Fifth, since the open learning system focuses on learning rather than credits, it will offer a wide variety of learning opportunities which are designed solely for personal enrichment, or are "creditable" in other than traditional ways--for example, by use of the continuing education unit. Sixth, and most importantly, the open learning system will differ from the traditional institution generally in demonstrating a readiness to meet students where they are educationally, to try to help them meet their educational objectives, using whatever resources can be made available, including locally available courses or resource people, correspondence offerings, and independent study opportunities, credit by examinations, and such credit bank programs as the New York Regents External Degree Program. This orientation to bringing together the learner and the program content, rather than focusing on time, space, courses, requirements, or degrees, will differentiate this

open learning system from traditional educational patterns. Finally, the open learning system will, if the economic projections prove accurate, differ from traditional education in reaching learners at a lower total cost.

This, then, represents the conceptual context within which UMA is developing. Anyone observing UMA, of course, will see both attempts to realize the characteristics listed above, and the constraints and realities encountered in trying to do so. It is difficult to effectively define UMA vis a vis other educational programs in the region. There is as yet little explicit clarity concerning curricular directions. All the assumptions and projections underlying the initial economic model have not as yet been realized. Delivery systems don't just happen, nor are courses developed free of developmental problems. And the ever-present financial uncertainties cause other kinds of administrative and operational concerns.

Few, if any, innovations develop as theory contends they should. UMA is no exception. In any case, it is important during the course of development to be concerned about ways in which success might be conceptualized, the topic of the next section of this paper.

Criteria for Determining Success

The mission of UMA is clearly a broad one, entailing a variety of possible activities and outcomes. Consequently, an evaluation of UMA based on its goals must necessarily be a multifaceted evaluation.

It may be instructive, however, to set aside for a moment the intentions of UMA specifically, in order to consider how any open learning or nontraditional study program might be evaluated. This requires a delineation of a range of possible "success" criteria. It may then be possible to select, from those possible evaluative criteria, the ones which appear to have most

relevance for a particular open learning program, such as UMA.

This section details categories of criteria for determining success. While some discussion of indicators may creep into the paragraphs to follow, the emphasis is on criteria, or dimensions, according to which a program might be judged. There are eight such categories, beginning with access.

Access

Many open learning programs, including UMA, take as their raison d'etre the extension of access to postsecondary educational opportunities to groups or individuals heretofore denied such access. There is, in short, a new clientele to serve, which existing institutions cannot or will not serve. [See, for example, volumes by Vermilye (1974); Houle (1974); Commission on Non-Traditional Study (1973)].

The issue of access is a complicated one. It involves discussing whether reasonable access to postsecondary education is a right or a privilege, whether opportunities for education should be a function of the chances of geographic location, age, sex, race, or physical condition, and whether equality of access is positively correlated with equality in acquisition of social benefits. While these issues are far from being settled, the broad criterion of access is one that will be considered important by most people rendering judgments on open learning programs. The access criterion may be stated as:

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1. To what extent and in what ways does a given open learning program in fact extend or expand access to postsecondary educational opportunities?

There are a number of ways to elaborate on this criterion. For example, expanding access must surely include making opportunities available to more kinds of people. Minority groups come to mind quickly. In addition, however,

are kinds of people not usually thought of as being a minority, but who normally are not well served by existing institutions. These kinds of people include senior citizens, people in penal institutions, those physically bedridden or unable to leave home, young prodigies, etc. Included in this group might be those people living in places where postsecondary institutions or programs simply do not exist.

Another way to think about access is to think in terms of <u>how many</u>--that is, access means providing a service to greater numbers of people than is presently possible. A commitment to mass higher or postsecondary education has not been articulated as clearly as the commitment to mass elementary/secondary education, but such a commitment may not be far off. Evidence concerning numbers of people served by a program will be utilized by some in making judgments on the criterion of access. In fact, some people hold this to be the <u>only</u> important criterion.

Access can be thought of as more than merely claiming that certain services are available. If those services are not made available in a form that can be dealt with by people, then availability alone may not satisfy the criterion of access. In some cases, this may mean delivering the services at a time or in a place accessible to the target population. In other instances, access may mean providing prerequisite remediation for program participants so they can effectively utilize available services. The point here is that a consideration of access may involve investigating the <u>conditions</u> of access, those factors which may make access a reality instead of a theoretical idea.

Evaluation of open learning programs according to access criteria implies to some an examination of the extent to which a program contributes

to equality of educational opportunity. Access and equality of opportunity are thus considered synonymous. Such interpretations fail to reflect a growing realization that equality of opportunity is not adequately defined simply as giving members of minority groups increased access to facilities, teachers, or other resources (Mosteller and Moynihan, 1972). If those groups do not subsequently achieve in a manner likely to increase their competitive capabilities in the social marketplace, then, according to one point of view, equality of opportunity has not been achieved. Equality of opportunity is a matter of outcomes, not merely inputs. Success in providing for adults access to courses in their homes is thus not a sufficient condition for arguing that a program or institution has provided for greater equality of opportunity. At the same time, however, it might be argued that such a program is addressing the issue of access.

To sum: those who wish to define success in terms of access criteria raise questions such as the following: Who is this program intended to serve? Are those target people appropriate recipients of the intended service? Are those people not now being served? How many potential participants exist? And, as the program is implemented, questions of intentions become questions of fact: Who was served? How many? Where?

Many open learning programs face considerable political opposition or suspicion from existing postsecondary institutions with regard to this access question. College and university faculty and administration worry about students (often thought of as FTE's) being taken away from the campus. Unless open learning programs are viewed as a legitimate outreach function of an institution, thereby contributing revenue to that institution, those programs are viewed by faculty and administration as a direct threat. Gathering data on learner characteristics is thus of critical importance

to open learning programs. The dilemma is a critical one: if open learning programs involve people generally characteristic of typical college or university populations, the credibility of these programs, on the criterion of access, is minimal. At the same time, however, open learning programs are supposed to be just that--open to anyone.

Relevancy to Needs and Expectations

A second criterion for determining success in open learning programs concerns the relevancy of the program. The criterion might be stated as:

> 2. To what extent does the program provide opportunities and services that are regarded to be of priority to communities in general, or to specific individuals?

Judgments of an open learning program made according to this criterion involve determining the extent to which needs or desires have been adequately described, and the extent to which the program reflects those needs. (See, for example, Chapter 5 in Grotelueschen, Gooler and Knox (1975). It is possible to develop a program which appears to be well organized, but deals with content or issues of no interest to anyone. Simply put: does the program in question address needs or expectations thought important?

Several observations may be made about the use of this criterion to determine success. First, the history of needs assessment efforts suggests that collecting information about needs does not always yield good prescriptions about what must be done to meet those needs. (See UMA Office of Research and Evaluation, Working Paper #5, 1975.) While it may be possible to articulate at a general level an appropriate relationship between an expressed need and a program response, the specifics of that program response are often more difficult to define. It is not always easy

to examine a program's activities and subsequently make judgments about the relevancy of that program to identified priority needs.

Second, this criterion is difficult to employ because different groups have different views of what is needed or desirable. Consequently, the same program may be simultaneously judged both successful and unsuccessful, depending on who is making the judgment. If a working consensus can be reached as to some common priority needs or desires, then this criterion can be used to gather aggregate judgments of success. If not, then individual judgments must stand alone.

The presence of multiple publics underscores a need to consider pluralistic purposes of open learning programs. It may be necessary to profile the needs and expectations of various interested publics, and to ask which of these profiles can be satisfied by a given program. Some programs may be able to meet the needs of a significant number of groups, while other programs can satisfy but a few number of profiles. A clear statement is important from program personnel as to the focus of the program, and, therefore, what kinds of needs are likely to be addressed.

Third: relevancy is not static. Needs and interests change over time, and thus the substance of this criterion will change. This particularly affects the standards used in judging a program on this criterion.

Quality of Program Offerings

Some people will render judgments about the success of an open learning program by examining only its products, or by examining the means by which those products came into being. For example, some audiences will determine the success of the University of Mid-America by looking at the

materials developed for each of its courses. Furthermore, some people may even make that judgment by looking at only one component of a course, such as the textbook, or audio tapes, or television. This criterion for determining success may be stated as:

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3. To what extent do the inputs, processes and products of the program appear to be of high quality?

The essence of this criterion lies in the determination of something called quality of product. Quality is a complex and elusive issue, in part because quality means different things to different people, thus making this criterion susceptible to differences in application (Pirsig, 1974).

There are a number of ways in which this criterion might be applied. One way is to consider the general acceptability or face validity of a product or process. That is, does the product look right? Does it appear to be good? In making these judgments, the observer of the product or process takes many things into account, and arrives at a single judgment of acceptable or unacceptable. This judgment may be based on an in depth study of the product, or on a superficial look at the product. The producer of the product often thinks that the observer has not taken everything into account that should be taken. Nonetheless, a judgment of success or lack of success is rendered based on whatever analysis an observer cares to make. The face validity question is an extremely important one. In many instances, if a program does not look "right," the observer or evaluator will go no further in thinking about the program. First impressions may be lasting impressions.

It is possible to subdivide this general acceptability criterion into a number of distinct issues which might be taken into account in

making one aggregate judgment of success. For example, a product may be assessed according to its technical/production quality. That is, are the video portions of the television program of high quality? Are the camera angles proper, is the color right, do the scenes flow together nicely, or has the editing been well done? Similarly, judgments might be made about audio quality, or the layout of print upon a page, illustrations utilized, etc. This technical quality is in some respects a matter of individual taste, but there are certain standards which appear to govern production or pedagogical quality. If technical or production quality is not adequate, then the observer may not wish to inquire any further about the program or materials.

This presents an interesting dilemma in the case of open learning or nontraditional programs. One of the reasons these programs <u>are</u> nontraditional is that they try new techniques. In many instances, it may be necessary to educate people as to how quality is assessed with respect to new kinds of technical approaches. Judgments may often be made because the technical or production aspects of a product do not look like other products that the observer is familiar with. If an open learning program bases its production decisions strictly on historical precedence, then new techniques or approaches will not be tried.

Another way of judging quality of program offerings is to examine the logic of products, and to ask whether that logic is appropriate and accurate. For example, the observer may wish to examine products in terms of the apparent match of the products or program to learner needs. If, on the surface, the products do not appear to be related in any meaningful way to the needs or capabilities of the learners for whom they are

intended, those products might be judged unsuccessful.

Similarly, an examination might be made of the extent to which the content included in a product is both adequate and appropriate. In many areas of study, the content may not be agreed upon or well established. An example might be a course under development at the University of Mid-America, entitled "The Great Plains Experience." There are many views about what content ought to be included in such a course. A given product, in this case a course, might be judged according to whether the content included in the course is the right content, and whether it is factually accurate.

Another way to look at the logic of products is to examine both the scope and sequence of the product. If things do not appear to be ordered correctly, and/or if the product contains too much or too little content, the product might be judged unsuccessful. Again, questions of scope and sequence are questions susceptible to individual judgments, based on experience and preferences.

Finally, the logic of products might be examined in terms of the assumptions underlying those products. For example, a product might be examined in light of the assumptions it makes about how adults learn. If those assumptions appear to the observer to be blatantly incorrect, the product might be judged unsuccessful. If, on the other hand, the assumptions apparent in the materials meet the expectations of the evaluator, then that product might be determined successful.

There exist a range of suggested models, techniques or procedures for evaluating instructional materials or products. (See, for example, Eash, 1974; Eraut, 1974; Scriven, 1974; Yelon, 1974; Southwest Educational Development Laboratory, 1969.) These techniques could be used to guide evaluations in this area.

Yet another way of looking at program offerings is to examine the development processes whereby those offerings were created. This examination, of course, must proceed on the basis of data accompanying the product or the course which describes how those products were created. An example of such information may be found in a UMA Office of Research and Evaluation course evaluation report (Brown, 1975). Different people have different views about how products ought to be developed. For example, someone might raise questions as to whether the product was developed in response to some assessment of needs. Or an examination might be made as to whether the product or course was developed according to a systematic instructional development process, including use of appropriate feedback from tests of the product as it was being developed.

There are a variety of instructional development models extant in the literature, and being utilized in various development centers. (See, for example, Baker (1973); Diamond et al (1975); Cavert (1974); Gagne and Briggs (1974); Davis, Lawrence and Yelon (1974)). While these models differ somewhat one from another, there are some common threads which run through all models. The evaluator may wish to determine whether those important threads in instructional design and production were present as the particular product or course being evaluated was developed.

Finally, questions about quality of program offerings may center about the ease or likelihood that the products or courses can be successfully delivered to the people for whom they are intended. If it appears that the product can't be delivered easily to the intended target population, in the kind of setting the learner finds himself, then that product may be judged unlikely to be successful. If, on the other hand, the

product includes defensible or understandable provisions for its delivery, then a judgment of success may be rendered.

The question of delivery is an important problem in most open learning and nontraditional study programs. Because these programs often are directed at unique populations, there are attendant delivery problems. One of the reasons for increased interest in teaching-at-a-distance programs is the availability of new or improved technologies (Carnegie Commission on Higher Education, 1972; Commission on Non-Traditional Study, 1973). While the technologies offer capabilities of increasing the range and effectiveness of delivery systems, they also present problems such as faculty acceptance, newness to learners, technical problems, etc. The Commission on Non-Traditional Study (1973) summarized some of the problems as follows:

> The major problems in educational technology may be divided into several specific components: the lag between engineering capability and social acceptance; the policies and techniques of management and production, including structural, collaborative, and legal necessities for swift and effective development; the economic unknowns that require research, together with those for start-up costs; the adaptation of teacher education to promote understanding and use of educational technology in appropriate and educationally strengthening ways; the means of effecting economies through the scale and critical mass of operation without creating centralized control.
>
> The whole field is becoming so complicated and the choice of devices so broad that decisions to be made about future trends and priorities are difficult. Yet the potentials are breathtaking: possibilities for increased communication between learner and teacher; elimination of time-space constraints with videotapes and cassettes; breaching the restrictions of geographic distance by means of satellite broadcasting. But these and other possibilities are not easily achieved. (p. 97)

Most originators of open learning programs decry attempts made to judge their programs on a single criterion. Nonetheless, such judgments

will be and are made. Most often those single judgments are made on the basis of perceived quality of the product or program offering. If that quality is not regarded as acceptable, then the program may undergo negative reviews, even before data about learner outcomes are available.

Learner Outcomes

While the apparent quality of materials or processes is important in judging the success of an open learning program, it is also of importance to determine the extent to which learner outcomes resulting from involvement in the program are satisfactory. This criterion might be stated as:

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4. Who learns or experiences what, and with what consequences?

A distinction is drawn here between learning and experience. This seems particularly appropriate for open learning programs, since many of these programs stress the value of the learner's experience almost as highly as a learner's achievement. Opinion will always be divided on this issue, of course. In its simplest form, it is a distinction between process and outcome. Some people feel that the act of engaging in a learning experience is as important as a final intended outcome of that experience. Others hold that the process is irrelevant, that what really matters is the final product or outcome. There is room for both points of view in determining the success of an open learning program.

Utilization of this criterion might involve examining some specific questions. One question is: Who learns or experiences what was intended in the program? Most open learning programs, or other kinds of educational or social programs, include statements of intentions for the learners or

participants. These intentions may be stated very minutely and behaviorally, or they may be stated more generally as goals or global objectives. In any case, it is hoped or intended that learners will either experience something in particular, or will achieve certain ends.

The assessment of learner outcomes has been the historical focus of evaluation efforts. (For a discussion of this approach, and some of the issues surrounding this focus, see, for example, AERA (1969); Lessinger and Tyler (1971); Stake (1967). The literature abounds with arguments pro and con on objective-based evaluation.) It could hardly be denied that attention to acquisition of prespecified goals or objectives is an important task. In determining the success of an open learning program, attention must be given to the extent to which stated goals were indeed achieved. Equally important, as was pointed out previously, might be an examination of the worth and value of those goals in the first place.

This question also assumes that different people learn different things. It may be important in determining the success of an open learning program to know which of the enrolled participants actually achieve what was intended. A program might be devised with a particular learner population in mind. That intended population may not achieve at all well, while some other populations who also participated in the program might have achieved what was intended. It is important to understand the characteristics of those who achieve as well as the characteristics of those who do not. It may be difficult, if not unwise, to make blanket statements about learners and what they learn.

It is also important to point out that intentions for a program emanate from several sources, not the least of which is from program participants.

While it is important to understand the extent to which participants achieved goals set by program developers, it may also be important to understand the extent to which learners achieved goals they had set for themselves. Most open learning programs serve a population which is not captive. Adults vote with their feet. If their own goals are not being satisfied, they will drop out of a program. In many respects, retention of people in courses and other experiences provides an indication of how well personal goals are being met.

A second related question has to do with what else was learned in addition to those things which were intended. In most learning experiences, there are unintended or unanticipated outcomes that accrue to participation in the program. Many times these outcomes may be more significant than intended outcomes. It is important in judging the success of an open learning program to understand the range of unintended ot unanticipated outcomes that do occur.

The idea of unintended or unanticipated outcomes is sometimes interpreted as a negative; that is, unintended outcomes are negative outcomes. Some may be. It may be the case, however, that some unintended outcomes may be very positive, and may bring a credibility and level of success to the program that might not have been otherwise achieved.

A third subquestion might be stated as: How do people feel about their experience? Educators have been criticized by some as being interested only in the cognitive development of learners, not in their overall personality. This subquestion focuses on the attitudinal or emotional outcomes from an educational experience. It may be extremely important to understand whether learners achieved a positive attitude toward a course,

and their involvement in it, or whether they emerged from the program feeling negative about postsecondary education and about themselves. It is difficult, and perhaps not fruitful, to argue about the existence of a distinct differentiation between affective and cognitive matters. There is merit in collecting data about both. It would be inappropriate to look only at affective outcomes in attempts to determine the success of an open learning program. Whatever the weighting, it would seem important to somehow take both aspects of learning into account.

Finally, it may be important to determine the long term effects of participant involvement in an open learning program. Many learner outcomes can be identified fairly immediately. Other outcomes will not become evident until a later time. For example, the number of people who ultimately achieve an academic degree might be examined. Such an examination cannot be made too early. Some of these long term effects may in fact be the more important outcomes to consider.

While it is easy to advocate an examination of long term effects, it is quite another to actually determine those effects. Longitudinal studies are expensive and, by definition, cannot provide information for a significant period of time. This fact, however, should not preclude open learning programs from allowing for and supporting the notion of some longitudinal studies of longer term learner outcomes.

Cost Effectiveness

The paramount criterion utilized by many people to determine the success of an open learning program concerns the relationship of cost to effectiveness. The criterion may be stated as:

5. Is the program cost effective?

To some, this criterion implies the comparison of one program in relation to other programs. Other people take this criterion to mean that the cost incurred in the development and operation of a program can be justified in terms of the outcomes of the program. Comparisons to other programs are not necessary, but rather justification is found in more absolute or situation-specific evaluation of the relation of cost to effectiveness.

For the same reasons that evaluation is being mandated and carried out, so too is cost effectiveness a critical concern. Given finite resources, the best use of those resources must be found. The issues of how much a program costs, and what effectiveness it achieves, are therefore central in the minds of most people when judging the success of an educational program. [Note: Literature on cost-effectiveness analysis is voluminous. Some of the more useful references for those interested in cost effectiveness issues related to higher education include Doughty and Beilby (1974); OECD (1964); Laidlaw and Layard (1974); English (1968).]

Utilization of this criterion generally applies examination of two factors: the comparability of costs, and the comparability of effectiveness. In many instances, only the cost factor is examined, with the effectiveness factor assumed to be constant. Here, people will look for how much an open learning program costs in terms of what other similar non-traditional programs, or traditional programs, cost. This involves making a determination of unit cost; that is, how much does the program cost per student participating, per credit hour earned, or degree awarded? Armed with this information, evaluators may seek similar information from traditional institutions, and compare per student costs. If an open learning

program costs considerably more per student, then that program may be judged to be unsuccessful, according to this criterion, particularly because most technologically-oriented open learning programs claim economies of scale. (Varner, 1975)

The difficulty with any cost analysis is arriving at decisions about what is to be included as a part of the cost of a program. Different institutions utilize different costs accounting schemes. For example, an open learning program which relies heavily on multi-media technology may incur significant design and production costs, but virtually no facilities cost. A traditional institution, on the other hand, has significant physical plants to maintain, but may incur less course or materials development costs. The direct comparison of unit costs across programs is thus made difficult because of inconsistencies in cost centers. While this is not the place for a detailed analysis of the difficulties of cost analysis and cost comparison, it is important to point out that, if this criterion is used to judge success, it must be used with a great deal of caution.

Similar cautions must also be raised about the determination of effectiveness. As has been pointed out consistently throughout this paper, different people have different views of what constitutes effectiveness. Thus, a valid comparison of effectiveness measures across programs or institutions is difficult to obtain. In addition, there is always confusion as to the difference between effectiveness and efficiency, or effectiveness and benefit. The problem of comparison of effectiveness becomes particularly acute when attempts are made to compare the effectiveness of one program which has one set of intentions, with another program which has a different set of intentions. The "comparison of apples and oranges" argument is always relevant here. [For a discussion of the problems

of comparison, see Cronbach (1963); Scriven (1967); Glass (undated).]

Yet another difficulty in the application of this criterion is the problem of matching or relating cost to effectiveness. Determining the relationship between cost and effectiveness does not appear to be a simple act. Since cost analysis schemes vary, and since effectiveness measures are not consistent, the relationship of cost to effectiveness, and any subsequent comparison of that relationship across programs, is tenuous. As a result, most people utilizing this criterion tend to utilize only cost comparison data in their judgments of success, rather than the comparison of ratios of cost to effectiveness across programs.

In many respects, this criterion ought to be one of the more straightforward criterion to be utilized in judging success. After all, it should be possible to account for what is spent in the development and operation of a program, to divide that cost by number of participants, and to arrive at a single index or unit cost. The same procedures could be used in any program, thus making costs comparable. Unfortunately, things don't appear to work out that easy in practice.

Some substantial work is going forward on the difficult issues of cost and effectiveness analysis. Empire State College, for example, has a grant to develop a cost effectiveness scheme for open learning and nontraditional study programs; Philip Doughty at Syracuse University has been developing a model of cost effectiveness for competency-based teacher education programs; agencies such as Rand and WICHE have been working to develop schemes as well. These models should be extremely helpful in implementing the criterion of cost effectiveness.

Institutional Impact

The success of any given program might be judged in terms of the impact that program has on other institutions or programs. People who are interested in utilizing this criterion regard the ripple effects of a non-traditional or open learning program to be a significant factor in judging the success of that program. The criterion might be stated as:

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6. To what extent and in what ways has the program influenced the policies and directions of other programs, institutions, or agencies?

Examination of this criterion involves looking at five possible kinds of impact that an open learning program might have on other institutions or agencies.

First, one might seek to determine the impact of an open learning program on the perceived mission of other institutions in the state or region in which the open learning program operates. Because the open learning program reaches out for new clientele, in new ways, other institutions faced with decreasing enrollments and increasing costs may reconsider their own activities and their own directions. There is considerable pressure to find new clientele, and to provide university or college services to those clientele. For example, the November 11, 1974, issue of The Chronicle of Higher Education reported a significant increase in the number of part-time students enrolling in traditional institutions, up to an 11% increase over the previous year. (See also Boyer (1974).) If an open learning program achieves a degree of success, and gains either acceptance or notice from other institutions, those institutions may regard the open learning program as providing a model for some of their own activities. Thus, one might look to see whether existing state education institutions put new

emphasis on outreach programs, on continuing professional education, or on educational services for groups such as senior citizens.

Similarly, examination might be made of the research priorities of an existing institution. An open learning program might influence those research priorities by pointing to whole new areas of inquiry which have heretofore not been considered important.

A second kind of impact concerns instructional practices in other educational institutions. Most open learning programs are striving to identify new ways of providing quality instruction (UMA, 1974; Stowe, 1974; Nibeck, 1974). These explorations involve experiments in technology, utilization of different arrangements of content, etc. If an open learning program causes re-examination of instructional strategies in existing institutions, then that open learning program would, according to this criterion, be judged successful. Here again, the realities of the present situation in postsecondary education may cause professors to re-examine the way they are teaching their courses, the techniques they use, the media they employ, and their arrangement of content with or without the stimulus of an open learning program. However, open learning programs may well compete with existing institutions for students. If open learning programs are able to provide instruction in a manner that is more acceptable to students, those students may opt to engage in learning through non-traditional means, as opposed to what they regard as inferior or less interesting instruction available from other institutions.

This should not be meant to imply in any way that instruction in existing institutions is of no value. Such is hardly the case. Those people utilizing the criterion of institutional impact will, however, look for signs that willingness to experiment with different instructional

strategies becomes more prevelant, or that funding agencies are more inclined to support experimental teaching strategies. Such influence may not be felt in the short term, but must be looked for over a longer time perspective. Instructional practices do not change overnight. However, over a period of years, some noticeable differences in instructional patterns might be discerned.

A third indicator of institutional impact might be an inclination among institutions to move toward more consortial/cooperative program efforts. For example, a university system in a state might be more inclined to work with state colleges to formulate a statewide outreach program. Willingness to do this may have been influenced by the existence of an open learning program in that state, which surfaced needs for a more coordinated outreach effort.

Consortial arrangements are often formed to achieve economies of scale. Open learning programs, particularly those that are technology-based generally incur heavy design and production costs. Most states or regions will need to engage in consortial efforts to develop significant open learning programs, since few states are able to build and operate such programs entirely with their own resources (Lipson (1974); Bolman (1975)). Thus, the formation of more consortia dedicated to providing unique kinds of instruction would be an indicator of the institutional impact of an open learning program.

A fourth way of looking at institutional impact is to examine the internal administrative policies of existing institutions. Most open learning programs seek to remove some of the artificial time and space limitations inherent in semesters, buildings, and regular meeting times for classes. This kind of flexibility may find its way into existing

institutional policies, particularly those policies governing registration, crediting, providing credit for life experience, etc.

For example, an institution might change its registration policies to allow for a process of continuous registration, where people can start and end courses at different times. Such policies are often the mainstays of open learning programs, but are rarely found in existing institutions. [Note: The Center for Instructional Development, Syracuse University, has been successful in advocating continuous registration, an important step toward greater flexibility for learners.]

Similarly, institutions may engage more heavily in granting credit for experience. The Regents External Degree Program in New York State, as well as Empire State College, have been leaders in this area, and have influenced administrative policies in other existing institutions. Administrative problems can often cause innovative instructional practices to fail. If satisfactory arrangements cannot be made for differential entry points into the system, and for progressing at different rates, then it is difficult to realize instructional flexibility.

Finally, institutional impact may be assessed in terms of the internal reward structures for faculty and administrators in existing institutions or agencies. In many institutions, there are few rewards for creative or experimental teaching, or for thinking about ways of reaching new clientele. If an institution, upon examining the mission and practice of an open learning program, decides that it too needs to achieve greater flexibility in its own programs, the institution might decide this is to be done by altering the reward structure for faculty. Thus, faculty members might

be given released time, or some financial resources, to work on the development of new kinds of course materials. Medsker et al (1975), for example, discuss incentives to attract regular faculty to participate in nontraditional study programs. Their study confirms that special incentive and reward mechanisms are required to ensure participation. Medsker refers to a study by Patton (1974), which focused on incentives and obstacles to individual faculty and departmental participation in nontraditional study programs. The Patton study, combined with other data from the Medsker study, reveals six major reasons for faculty participation. They are:

1. General support for the concept of extended education; the desire to "do something" for previously unserved students.

2. Previous experience with continuing education. A majority of staff in the extended-campus and liberal studies programs indicated in the surveys that they had had experience in continuing education. Interview data further revealed that for some faculty previous experience in continuing education as a student or an instructor has been an important reason for program involvement.

3. Opportunity for contact with certain types of students. Survey data revealed that "the chance to work with adult students" has been an important motivator for many faculty. In addition, interviews suggested that faculty are also attracted by the opportunity to work with students who may be practicing professionals in their fields.

4. Desire to initiate or participate in a new program. Interviews indicated that many faculty see extended degree programs as offering opportunities for innovation and experimentation which regular programs lack.

5. The prestige of participating in the program. While the majority of faculty indicated in the survey that involvement would have no affect on their opportunities for promotion, in several instances faculty were moved to participate because a deal or department chairman indicated that it was a particularly tough assignment, demanding the best faculty available.

6. Extra compensation. Interviews with both involved and noninvolved faculty from host institutions indicated that financial compensation for work in the extended degree program in addition to their regular salaries represented a very important incentive for program participation.

These reasons for involvement in nontraditional study gives clues to the kinds of changes in reward structures that might occur within existing institutions.

Not all institutions or agencies will be, nor necessarily should be, influenced by an open learning program. Many institutions are carrying out their important mission in an effective manner, and ought not to change their emphases to be more like an open learning program. There are subtle improvements that can occur, however, in most institutions. If an open learning program is done right, that program may well become a prototype for other institutions or, perhaps more importantly and realistically, some aspects of an open learning program may be seen as appropriate for use in an existing institution. It is these subtle, smaller kinds of improvements that may really spell success for an open learning program, as defined by this criterion.

Consequences

The success of an open learning or nontraditional study program might be judged not only according to its intentions, but according to the consequences resulting from the program as well. This criterion might be stated as:

7. What are the short and the long range consequences of the existence of open learning or nontraditional study programs for institutional/political policies, for individual capabilities and priorities, and for broad social values or policies?

In addition to some of the possible impacts of an open learning program on existing institutional practices and policies, suggested above, a broader political consequence may also be felt. This concerns the financing of post-secondary education. It is possible that an open learning program might cause legislatures and others to rethink the basis for funding postsecondary education within a state or within a region. For example, questions may be raised about providing state appropriations for participants enrolled in non-credit courses. Or some new thinking may be done about financing the educational activities of part-time students. One of the outstanding features of most open learning systems is the enrollment of a great many part-time students. In many states, those students are not eligible for scholarships or financial aid. One of the characteristics of a major open learning program would be the enrollment of a great number of these part-time students, thus possibly creating a political press for re-examination of financing policies concerning part-time studies.

Other institutional or political consequences might be ascertained over time. Some of these consequences are likely to be positive, while others are negative. Presumably, those positive consequences which occur would lead to a judgment of success for an open learning program.

In addition to institutional consequences, there are at least three kinds of consequences that might accrue to an <u>individual</u> participating in an open learning program. First, that individual might undergo changes in

his or her attitude toward learning. Such changes in attitude may have implications for how people think about their jobs, possibilities of changing or improving their occupational status, the use of leisure time, etc. Many individuals do not feel they have the capability to succeed in formal learning experiences. Successful attempts to engage in learning through an open learning program may change attitudes, and may make individuals more inclined to engage in further educational experiences. If the predictions of increased leisure time are even partly accurate, people are more and more going to need to know how to deal with that time. One of the positive consequences of involvement in an open learning program might be to enhance one's ability to creatively use leisure time.

Some open learning programs are aimed at recurrent education, particularly for those people who need to change occupational patterns in mid-career. Many of these people cannot leave their present occupations to attend school full-time, and thus find open learning programs to be tailored to their educational needs. If as a result of this increased flexibility in learning, individuals are more confident in their capacity to improve themselves occupationally, a positive consequence will have been obtained. There is an attendant danger, however: involvement in open learning programs, or any educational programs for that matter, cannot guarantee occupational improvement. Too often, false expectations are created by well-meaning educators.

Individuals engaging in open learning programs may also develop greater political and economic sophistication. Such sophistication may eventually have consequences for local governments, and for the social and political establishment in given communities. As people become more educated, and

more positive in their ability to learn and to interpret events and information, they may exhibit different behaviors with respect to the governments of their community. For example, sophisticated consumers may have an impact on the retailing structure of a community or region. Data analyzed by the National Center for Educational Statistics (1975) reveals that educated persons exhibit higher participation rates as voters than do those with limited education. Again, it is unlikely that open learning programs in and of themselves are going to produce massive changes in this area, but, if one takes a view of incrementalism as a viable form of social change, then the small changes that occur in each individual may aggregate together to result in significant social, political, and economic consequences.

Finally, and perhaps most importantly, involvement in open learning programs may have consequences for the overall view an individual has of himself or herself. An individual may gain more confidence as a result of success in open learning programs. This kind of success may carry over into other areas of personal life. Changes in self-image are important changes, and need to be taken into account in evaluating the success of an open learning program.

An open learning program may also have impact on the value structures and priorities of society at large. That is, implementation of open learning programs, and subsequent study of those programs, may bring about changes in other social efforts, such as health care programs or poverty-oriented programs. Open learning programs could serve as a model for the delivery of social services and could thus have consequences for delivering non-educational services as well. It is in this area that development of

indicators is so important. Indicators are designed to enable policy makers to monitor the pulse of the system, to ascertain changes or trends over time. It may be extremely important to understand the impact of open learning or nontraditional study programs on thinking about and development of broad social policies.

More specifically, the existence of open learning programs may have an impact on the premises which underlie the educational system in society. What happens in open learning programs may cause a re-examination of our assumptions about how adults learn, who wants to learn, what they want to learn, and the ways in which they learn best. It certainly may have consequences for priorities among the resources devoted to education. As the general age level of the population increases, more and more attention will be given to the educational needs of adults, including senior citizens. Open learning programs may open new frontiers of thought about education, with resulting examinations of the assumptions and premises that undergrid our formal educational system.

These are not easy things to ascertain. Evaluation of consequences, both in the short term, and perhaps more importantly, second order consequences over a longer term, are essential measures, but extraordinarily elusive (Locatis and Gooler, 1975). This criterion is not a clear one. Most educational programs, including open learning programs, tend to be caught up in the day-to-day press of activities, and worry little about overall consequences resulting from the existence of the program. Such thinking is being altered to some extent. An indicator of the awareness of the need to examine second order consequences is the establishment of an Office of Technology Assessment in the Executive Branch of government,

whose mission it is to study possible second order consequences resulting from any kind of human enterprise, including the delivery of social services. Additional efforts are likely to be directed at educational programs in the future.

Generation of Knowledge

Much attention must be given to the goals, processes, and outcomes of an open learning program if one is to determine the success of that program. There is also a need to determine the extent to which any program contributes to a greater understanding of the phenomenon being addressed by the program. This criterion might be stated as:

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8. To what extent does the program contribute knowledge useful to a better understanding of the problems, issues, and practices of the field?

Those who utilize this criterion believe that a successful program is one which contributes to the general state of understanding of a phenomenon. Open learning programs, for example, might be expected to contribute new understandings of the nature of the adult learning population, of the utilization of new instructional technologies, or of the consequences and impacts of operating such programs. In a sense, this generation of knowledge criterion cuts across all of the previous criteria.

Those interested in this criterion of success expect that knowledge may be generated in at least four ways. First, the success of a program might be judged according to the adequacy of the recording of the experience of that program, as well as a recording of judgments about that program. Of particular importance here is the gathering of data that describes in some detail how things were done, why they were done, and with what results.

For example, careful documentation of attempts at needs assessment might help people better understand the process of gathering data about needs, and the potential utility of having such information. Similar study and documentation might be made of the various instructional development processes used in a program, the delivery mechanisms employed, or the outcomes achieved. The assumption here is that it is important to document such things, for in such documentation can be found clues to improving upon those processes in subsequent programs. Gathering judgments about a program may also be useful in this documentation effort. How people felt about what was going on is critical data, and may help in generally understanding the phenomenon under study. Few programs adequately document what they do. The press of day-to-day business makes it difficult to be reflective or analytical about what is being done, or even to record a history of events and purposes. Bob Stake has referred to this documentation as "portrayal" of programs. For discussion of this idea, see Kemmis (1973); Parlett and Hamilton (1972); and Stake (1975).

Second, a program might be expected to engage in systematic variations and subsequent analysis. For example, at the University of Mid-America, it might be reasonable to systematically vary the approach used in television components, to determine which approach seems to work best, for what purposes, and under what conditions.

If an open learning program is to engage in such systematic variation and analysis, it must have a strong commitment to research and evaluation. Not all programs can afford such commitment. Those who would utilize this criterion for judging success, however, will look to the results of careful experimental research conducted within and about the project, to

determine the extent to which that work contributes to a general understanding of the phenomenon of open learning.

The generation of knowledge might also involve a long term indicator study, which has been alluded to previously. Of great importance is the determination of which indicators are appropriate, and how they are to be monitored. In many respects, continuous monitoring of these indicators provides extremely important generalizable knowledge about the educational program in operation. Without such a long term study, a thoughtful analysis of the benefits and limitations of programs of open learning or nontraditional study will be very difficult to make.

All of the above points presume a kind of descriptive, fact-oriented knowledge. It may be as important, however, for a project to develop articulate hypotheses as it is to test out those hypotheses. Continuous, active inquiry is one of the hallmarks of open learning programs. Learners are encouraged to be curious, to be active in their pursuit of new understandings about themselves and about their world. So too ought a program be encouraged to engage in new ways of examining itself, to develop hypotheses, and whenever possible, to test out those hypotheses. Knowledge is not made up exclusively of that which is known for certain, but also that which is hypothesized. A part of the success of an open learning program may therefore rest on its capacity to generate intelligent hypotheses about itself and its impact. Furthermore, some attempts must be made to determine the extent to which that knowledge is usable and used.

Summary

Open learning or nontraditional study programs, like any new educational or social programs, are susceptable to considerable formal and informal evaluations directed at determining the success of those programs.

There are numerous kinds of criteria whereby judgments of success or failure may be rendered, including:

1. To what extent and in what ways does a given open learning program in fact extend or expand access to postsecondary educational opportunities?

2. To what extent does the program provide opportunities and services that are regarded to be of priority to communities in general, or to specific individuals?

3. To what extent do the processes and products of the program appear to be of high quality?

4. Who learns or experiences what, and with what consequences?

5. Is the program cost effective?

6. To what extent and in what ways has the program influenced the policies and directions of other programs, institutions, or agencies?

7. What are the short and the long range consequences of the existence of open learning or nontraditional study programs for institutional/political policies, for individual capabilities and priorities, and for broad social values or policies?

8. To what extent does the program contribute knowledge useful to a better understanding of the problems, issues, and practices of the field?

Some people will emphasize some of these kinds of criteria more than others. A single program may thus be evaluated differently, depending on who does the evaluation, and what criteria they feature.

This paper represents only a first step in a process of conceptualizing the bases upon which policy might be established concerning provision of postsecondary education opportunities and benefits to adults. It remains to inquire about the adequacy of the above categories, to define more clearly the specifics of each category, to determine useful and appropriate standards, indicators, and measures, and to commit resources to a thoughtful analysis of the success of open learning programs. Evaluating new programs,

particularly in terms of the benefits deriving from those programs, is no easy task.

Implications for a UMA External Evaluation

Given both the context for an evaluation of UMA, and the categories of criteria for determining success as outlined above, on what might an external evaluation of UMA finally focus? There are a number of kinds of people who have an interest in UMA, each of which will look for different things in an evaluation. The following questions may be representative of the concerns of many of these audiences:

1. Who exactly does UMA serve?
2. How many are served?
3. Who wants what UMA offers, or, put another way, does UMA offer what people want?
4. Is the quality of what UMA develops and delivers acceptable, and is it developed and delivered at a justifiable cost?
5. Do learners achieve at an acceptable level, and do they value their experience?
6. Does UMA adequately and regularly examine itself, learn from its own experiences, and portray those experiences for the benefit of others?
7. What are the long-term consequences of the existence of UMA?
8. Is UMA well managed? Does the consortium work? Are internal operating policies and procedures effective?
9. Is UMA a useful model for others?

It will take time to address all these questions. As UMA continues to gain experience, other questions will arise. Educational evaluation must be responsive to new demands and pressures, just as the UMA program itself must be responsive to changing needs and expectations.

To pursue some of these questions will require complex methodologies, while others present difficult data interpretation problems. The importance and/or usability of certain kinds of data will always be determined by the nature and immediacy of decisions to be made about the UMA program. Those conducting an external evaluation are faced with either knowing in advance what decisions are to be made about UMA and gathering data accordingly, or seeking to gather a great deal of data which may have relevance to decisions that arise in the future.

The potential magnitude of UMA presents severe problems in ascertaining social benefit. Funders, program personnel, and evaluators face difficult decisions as to when and how go no-go decisions are to be made about a program. Significant benefits generally accrue only over time, yet decisions about continued allocations of resources cannot await that time. Therefore, data of a predictive nature must be collected early. Data about the nine questions posed above certainly appear to be central to any assessment of the success of UMA.

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